

Claims

1. A transaction processing system comprising an interface for receiving authorisation requests, an interface for transmitting authorisation outputs, and a processing means comprising means for determining from authorisation request data if the system output should be positive or negative, characterised in that the processing means comprises:
  - 10 a setup means comprising means for storing transaction conditions associated with particular customers, and
  - 15 authorisation means for dynamically retrieving a transaction condition associated with the customer of each authorisation request on a per-transaction basis and for applying said conditions to the authorisation request.
- 20 2. A transaction processing system as claimed in claim 1, wherein the setup means comprises an interface comprising means for allowing each customer to define said conditions.
3. A transaction processing system as claimed in claim 2, wherein said interface comprises a Web server.
- 25 4. A transaction processing system as claimed in claim 1, wherein the setup means comprises means for storing predefined template conditions, and for allowing a customer to select predefined template conditions for his or her card.
- 30 5. A transaction processing system as claimed in claim 4, wherein the setup means comprises a fraud manager interface comprising means for allowing a fraud manager with access control to define said template conditions.

6. A transaction processing system as claimed in claim 4 wherein the predefined template condition comprises specific placeholders for conditions, values and logical operators.  
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7. A transaction processing system as claimed in claim 4 wherein the setup means comprises input means for allowing a customer to input customer specified parameters to the predefined template conditions.
- 10 8. A transaction processing system as claimed in claim 4, wherein each template comprises an associated action which is the action to be taken if, upon evaluation, the template condition evaluates to "true".
9. A transaction processing system as claimed in claim 1, wherein at least some of the  
15 conditions are in the form of program code rules.
10. A transaction processing system as claimed in claim 9, wherein the setup means comprises means for maintaining a rule database.
- 20 11. A transaction processing system as claimed in claim 10, wherein the rule database comprises means for storing rules in a format which is indexed on a particular customer or customer card number.
12. A transaction processing system as claimed in claim 11, wherein said rules  
25 comprise system, product and customer rules.
13. A transaction processing system as claimed in claim 10, wherein said rules are stored in a format which does not require parsing of logical string-based expressions for processing.

14. A transaction processing system as claimed in claim 1, wherein the authorisation means comprises means for automatically transmitting a notification to a customer under control of the conditions.
- 5 15. A transaction processing system as claimed in claim 14, wherein the authorisation means comprises means for receiving confirmation of authorisation from a customer in response to a notification.
- 10 16. A transaction processing system as claimed in claim 1, wherein the authorisation means comprises means for successively applying system-level, card product-level, and the customer conditions upon receipt of an authorisation request.
- 15 17. A transaction processing system as claimed in claim 1, wherein the authorisation request interface comprises a network interface for interfacing with a card payment network.
- 20 18. A transaction processing system as claimed in claim 17, wherein the authorisation request interface comprises a network interface for interfacing with an issuer front end system.
19. A transaction processing system as claimed in claim 17, wherein the output interface further comprises a card management system interface for interfacing with an issuer card management system.
- 25 20. A transaction processing system as claimed claim 17, wherein the network interface comprises means for communicating over TCP/IP, X.25, Serial, Modem, SNA or any other communication format.

21. A transaction processing system as claimed in claim 17, wherein the network interface comprises means for converting received messages into a general standard data format.
- 5 22. A transaction processing system as claimed in claim 21, wherein the network interface comprises a communication header module for converting received messages into a standardised data sequence of bytes.
- 10 23. A transaction processing system as claimed in claim 19, wherein the card management system interface comprises a protocol header module comprising means for converting a standardised sequence of bytes received from the network interface into an internal format for processing.
- 15 24. A transaction processing system as claimed in claim 19, wherein the card management system interface comprises a protocol header module comprising means for converting a standardised sequence of bytes received from a communications header module into an internal format for processing.
- 20 25. A transaction processing system as claimed in claim 22, wherein the communication header and the protocol header modules comprise means for sequentially checking for, receiving, converting and routing messages and data.
- 25 26. A transaction processing system as claimed in claim 17, wherein the communication header and protocol header modules comprise means for routing transaction requests and responses between the card payment network and card management system.
27. A transaction processing system as claimed in claim 10, wherein the setup means comprises means for updating the rules database in real time.

28. A transaction processing system as claimed in claim 1, wherein the authorisation means comprises means for automatically transmitting a notification to a fraud manager if a possible fraud is detected.

5 29. A transaction processing system as claimed in claim 1, wherein the authorisation means comprises means for automatically transmitting a notification to a customer if a possible fraud is detected.

10 30. A transaction processing system as claimed in claim 1, wherein the authorisation means comprises means for automatically transmitting a notification to a customer if an authorisation request is rejected.

15 31. A transaction processing system as claimed in claim 1, wherein the authorisation means comprises means for automatically transmitting a notification to a customer if a request is authorised, allowing a customer to maintain a local log of authorised requests.

20 32. A transaction processing system as claimed in claim 1, wherein the setup means comprises means for controlling customer activation of a card.

33. A transaction processing system as claimed in claim 32, wherein said controlling means comprises an on-line banking interface.

25 34. A transaction processing system as claimed in claim 32, wherein said controlling means comprises an ATM interface.

35. A transaction processing system as claimed in claim 17, wherein the authorisation means comprises means for receiving a cardholder request that a card be deactivated.

36. A transaction processing system as claimed in claim 35, wherein said means comprises means for receiving an SMS from a cardholder.

5 37. A computer program product comprising software for completing a transaction processing system as claimed in claim 1 when executing on a digital computer.

38: A transaction processing method carried by a verification system, and comprising the steps of

10 (i) receiving a transaction condition associated with a customer ;

(ii) writing said condition to a condition database also storing conditions associated with other customers;

15 (iii) receiving a transaction authorisation request from a transaction network;

(iv) processing said received authorisation request by dynamically retrieving a condition associated with the customer of the authorisation request on a per transaction basis;

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(v) applying said condition and determining from the authorisation request data if the requested transaction should be approved or denied.

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